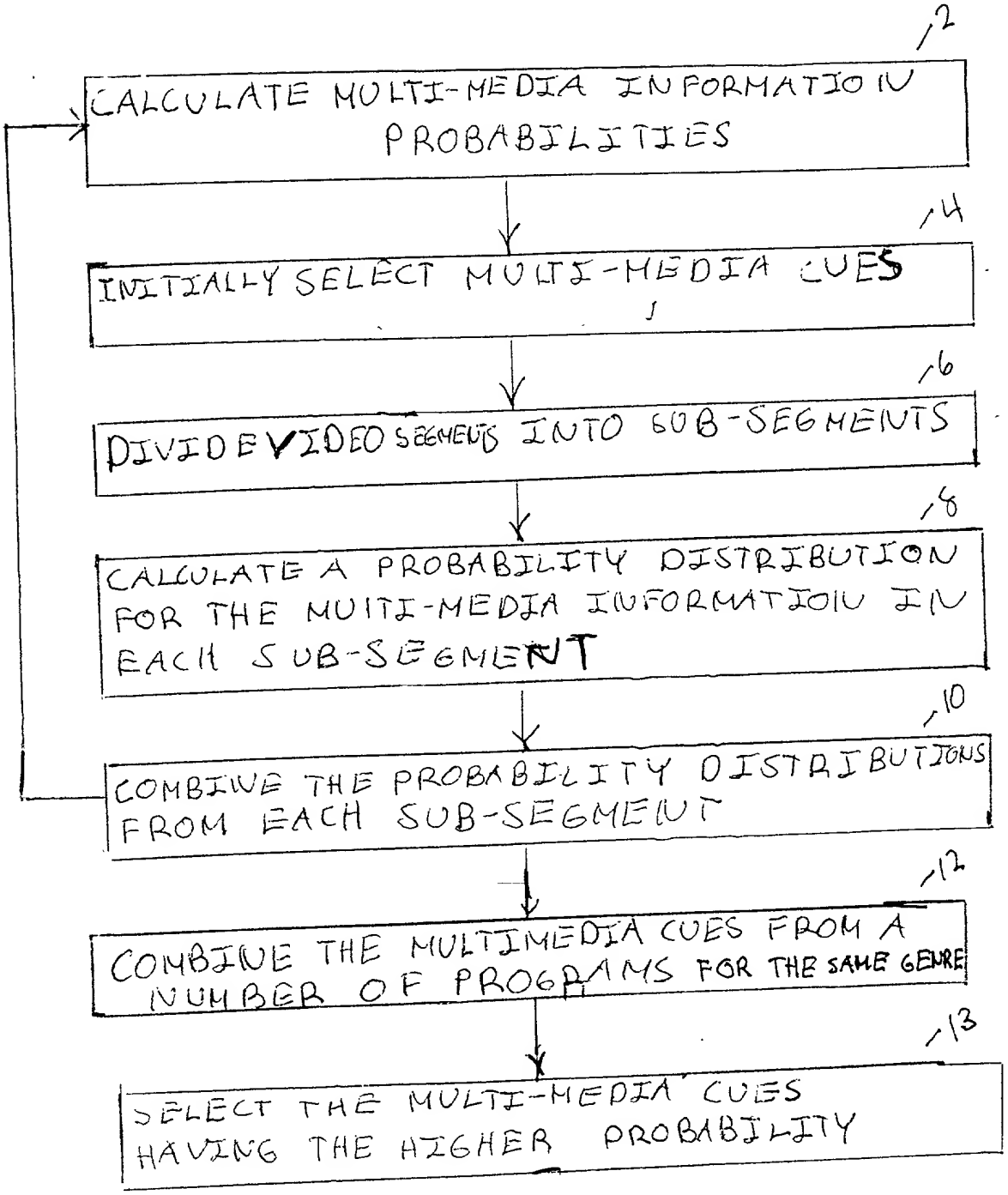
12
CALCULATE MULTI-MEDIA INFORMATION PROBABILITIES
14
INITIALLY SELECT MULTI-MEDIA CUES
16
DIVIDE VIDEO SEGMENTS INTO SUB-SEGMENTS
18
CALCULATE A PROBABILITY DISTRIBUTION FOR THE MULTI-MEDIA INFORMATION IN EACH SUB-SEGMENT
10
COMBINE THE PROBABILITY DISTRIBUTIONS FROM EACH SUB-SEGMENT
12
COMBINE THE MULTIMEDIA CUES FROM A NUMBER OF PROGRAMS FOR THE SAME GENRE
13
SELECT THE MULTI-MEDIA CUES HAVING THE HIGHER PROBABILITY

FIGURE 1

Frame start	Frame end	silence	noise	speech(sp)	music	sp+sp	sp+noise	sp+music
0	18	1	0	0	0	0	0	0
18	89	0	0	0.573333	0.426667	0	0	0
90	155	0	0.716418	0	0.283582	0	0	0
156	198	0	0.212121	0	0.787879	0	0	0
199	276	0	0.552941	0	0.447059	0	0	0
277	304	0	0	0	0.666667	0	0	0.333333

FIGURE 2

Vote1	Vote2	Vote3	Threshold1	Threshold2	Threshold3
1	1	4	0.30	0.50	0.80
1	1	4	0.30	0.60	0.90
1	1	4	0.40	0.60	0.80
1	2	3	0.30	0.50	0.80
1	2	3	0.30	0.60	0.90
1	2	3	0.40	0.60	0.80
1	2	4	0.30	0.60	0.80
1	2	4	0.30	0.60	0.90
1	2	4	0.40	0.60	0.90
1	2	5	0.30	0.50	0.80
1	2	5	0.30	0.60	0.90
1	2	5	0.40	0.60	0.80
1	3	5	0.30	0.50	0.80
1	3	5	0.30	0.60	0.90
1	3	5	0.40	0.60	0.80

FIGURE 3

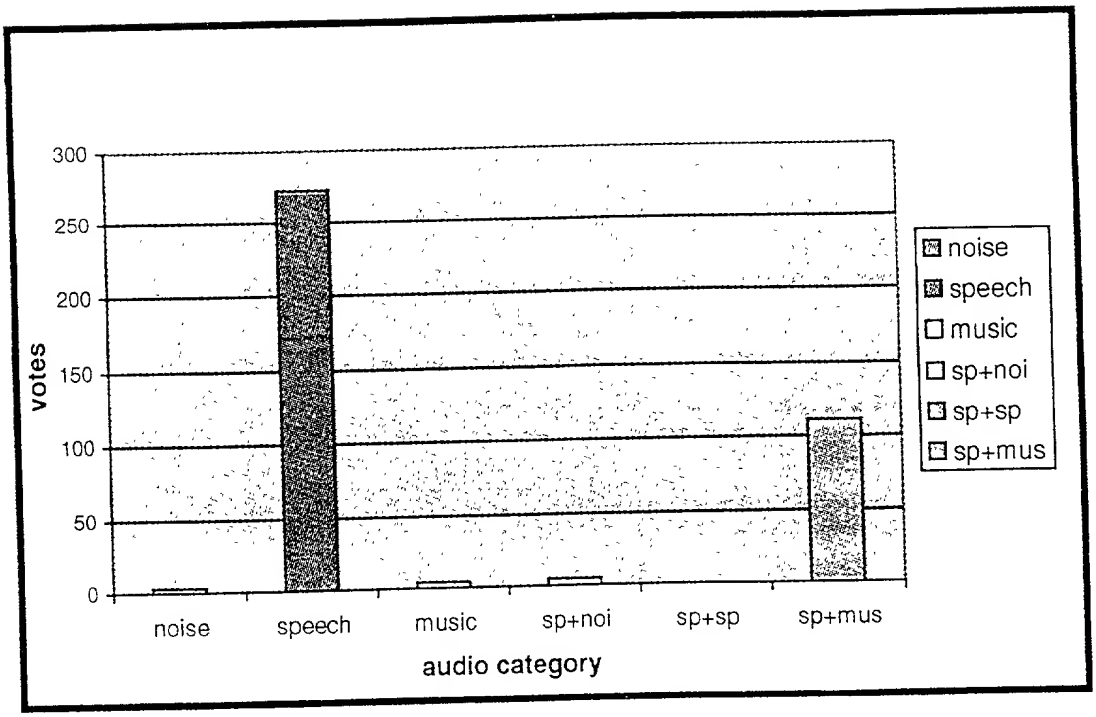

FIGURE 4

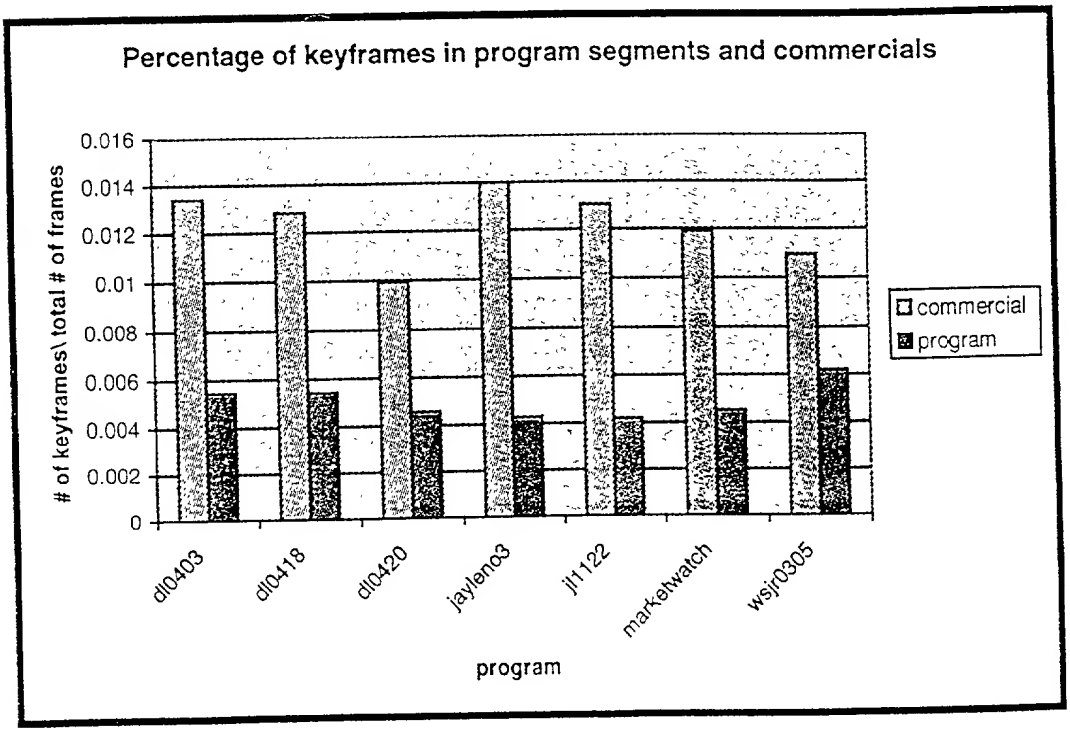

FIGURE 6

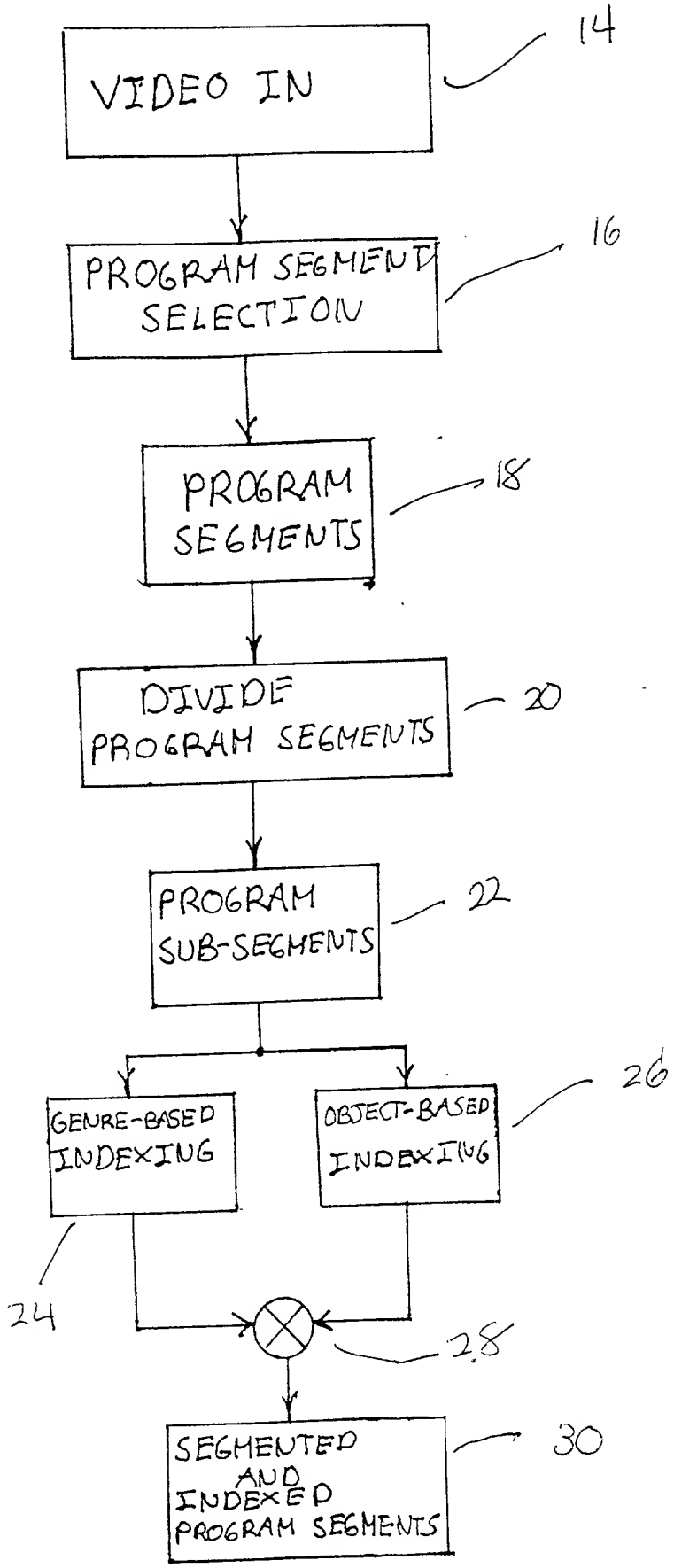
VIDEO IN
14
PROGRAM SEGMENT SELECTION
16
PROGRAM SEGMENTS
18
DIVIDE PROGRAM SEGMENTS
20
PROGRAM SUB-SEGMENTS
22
GENRE-BASED INDEXING
OBJECT-BASED INDEXING
26
24
28
SEGMENTED AND INDEXED PROGRAM SEGMENTS
30

FIGURE 5

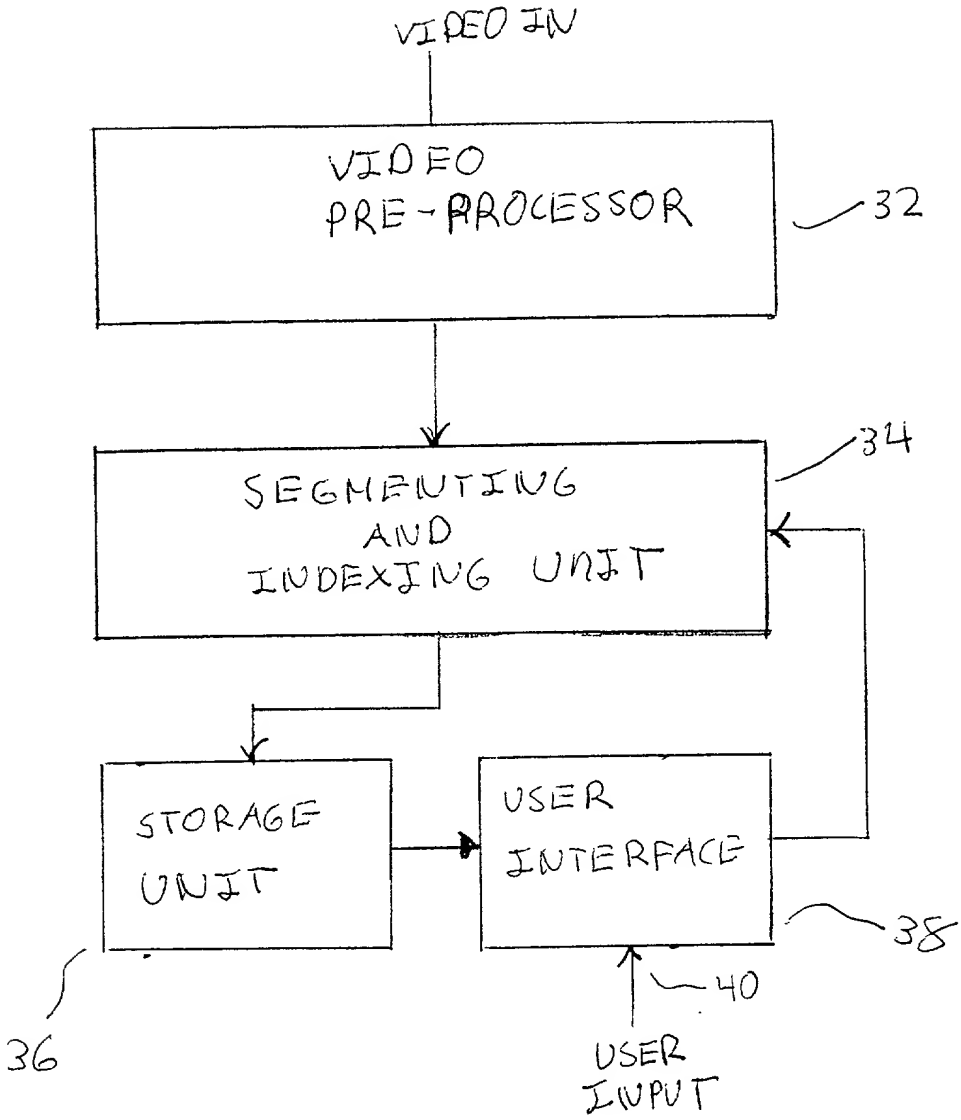
VIDEO IN
VIDEO PRE-PROCESSOR
32
SEGMENTING AND INDEXING UNIT
34
STORAGE UNIT
36
USER INTERFACE
38
40
USER INPUT

FIGURE 7